U.S.S.N. 09/783,338

Filed: February 14, 2001

AMENDMENT AND RESPONSE TO OFFICE ACTION

Claims As Pending

- 6. (original) A method for site-directed mutagenesis of a nucleic acid molecule comprising the steps of:
- a) hybridizing a mutagenic oligonucleotide to a target region of a double-stranded nucleic acid molecule, wherein the mutagenic oligonucleotide comprises a mutagen incorporated into a single-stranded nucleic acid that forms a triple-stranded nucleic acid molecule with the target region; and
- b) mutating the double-stranded nucleic acid molecule.
- 7. (original) The method of claim 6 comprising the additional step of activating the mutagen prior to the mutation step.
- 8. (original) The method of claim 6 wherein the mutagen is selected from the group consisting of psoralen and acridine orange and is activated by light.
- 9. (original) The method of claim 6 wherein the mutagen is selected from the group consisting of acridine orange, an alkylating agent, a cis-platinum analog, a hematoporphyrin, a hematoporphyrin derivative, mitomycin C, a radionuclide, and a molecule that interacts with radiation to become mutagenic.
- 10. (original) The method of claim 6 wherein the mutation alters the activity of the double-stranded nucleic acid molecule.

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- 11. (original) The method of claim 6 wherein the double-stranded nucleic acid molecule is a gene.
- 12. (original) The method of claim 6 wherein the gene is an oncogene.
- 13. (original) The method of claim 6 wherein the gene is a defective gene.
- 14. (original) The method of claim 6 wherein the double-stranded nucleic acid molecule is all or a portion of a viral genome.